

OSA - 0974-67

27 February 1967

25X1

To: [REDACTED]

Subject: SUMMARY OF BW-3 PERSONAL EQUIPMENT MEETING  
FEBRUARY 15, 16, 1967

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[REDACTED]  
The following summary is our understanding of the results of our meetings on February 15th and 16th. Please feel free to comment on any of these points and opinions.

1. Seat Headrest

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A. No problems with the headrest in the aft position. All pilots can reach it unpressurized. All pilots except one, [REDACTED] can reach the headrest pressurized. On some pilots the adjustment of the helmet hold down and seat kit side straps were a factor in reaching the headrest. Two helmets were the larger size model.

B. Can't justify the parachute modifications, neck relief, on basis of need. [REDACTED] though now comfortable, would like to have neck area of parachute modified.

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C. Seven pilots were checked for length of shoulder harness to be used without the adjustment buckle. Lengths came out as follows:

61-3/16; 60-11/16; 62-1/8; 61-3/4;  
60-7/8; 61, and 66-3/8.

The last one was [REDACTED]

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D. All pilots used sleeping bag cushion with the small spacer in the back removed except [REDACTED] who said he could not use it because, chute hung on his back and he could not go down far enough when refueling.

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On file USAF release  
instructions apply.

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E. We are committed to have new shoulder harness  
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F. [ ] will modify drogue flap to protect  
metal spring in drogue pack and to reduce cutting  
into headrest.

2. Seat Belt

A. Submit test report.

B. Have hardware in four weeks.

3. Shall we submit a proposal to add a URT27 radio beacon  
to the seat since main chute beacon is available only below  
15,000 feet and in mountainous terrain its utility is too  
restricted at those low altitudes?

4. A. Enlarged ping pong balls for life vest and horse collar  
inflation were found impractical in the cockpit checkout.  
A tee handle will be evaluated. In the interim, the small  
red knob shall be used with relocated life vest inflator.

B. The added horse collar is very effective in righting  
floatation to a face upward position. It was reasonably  
compatible in the cockpit. The added bulk in the neck  
ring area makes the new shoulder harness mandatory.  
Access to the [ ] riser releases is restricted  
when collar is inflated. Access uninflated should also  
be checked out.

C. Access to parachute chest strap is also restricted by  
the horse collar.

D. New collar will be available in forty-five days. It will  
be furnished with automatic inflator furnished by us.

E. Horse collar was demonstrated with the auto-inflator in  
the second immersion. Its ability to save a disabled  
man was obvious when used on the horse collar.

Opinion differs on where auto-inflators should be used.  
The pilots want them on the vest only. [ ]  
wants them on the horse collar only. [ ] feels that  
inflation of a vest with an unopened chest strap on an  
unconscious man may cause trouble. We will submit  
a qualification and reliability report on auto-inflators  
including Navy Qualification Report, if any.

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5. Suit Controller Beefed-up Fittings and Guard

- A. Firewel will submit ECP to beef-up fittings.
- B. Suit controller guard - In cockpit evaluation it was objected to because it did not accomplish protection enough to justify its use.
- C. Instead, the following action is being taken:  
  
Increase bending strength of fittings outside the guarded area.

6. Tee-handle Parachute Release

Pilots request that opening be enlarged to permit pilots to get finger through to grip D-ring. Firewel to do.

7. Auxiliary Emergency Cooling

- A. Airplane modification is waiting for decision on which airplane it will be installed on.
- B. Firewel will make heat chamber runs instrumented to determine effectiveness. [ ] will work on this requirement and coordinate with Firewel.
- C. Pilots have been using IR shields improperly. They said, take them off, apparently unaware that they shall be used only when they have a heat problem. With the new aft vents in the cockpit, the pilots said they don't need the IR shields. We asked them to keep them for emergency cooling.

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8. PPG Visors

All pilots like them. SPO is buying fifty for SR-71. They will have extended defrosting grids. Three to four months until first one will be delivered.

9. Heated Gloves

- A. Identified elements to heat gloves.
- B. Seems feasible to produce.
- C. [ ] will make one pair for test and power requirement evaluation.

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10. Super Insulation Spacer in Suit

- A. Discontinued it because they don't seem to need it.
- B. Pilots say it is too bulky.

11. Inadvertent Life Vest and Life Raft Inflation is a question of concern with the pilots:

- A. Beale and [ ] are running tests and proposing various remedies.
- B. Relief valve on vest to relieve at 2-1/2 psi.
- C. [ ] proposing an automatic raft stabber.
- D. Beale is flying with oral inflation tube exposed and clipped to the garment, but with the valve unlocked and available for instant manual pressure release.

12. New Raft - Two Stage Inflation

- A. Looks very promising. Boarding with horse collar is no problem. For that matter, the horse collar did not seem to hinder boarding the conventional raft.
- B. David Clark will attempt to get packed volume and weight of new raft down to size and weight of present raft.

13. Automatic Survival Kit

- A. [ ] will submit test and cost proposal to test.
- B. Altitude choice of settings shall be blocked above 13,000 feet.
- C. Choice of delay shall be blocked below nine seconds which will be subject of later review.

14. URT27 Beacon Tests on Whirl Tower

- A. New Installation beacon in chute by 27 February 1967.
- B. Minimum of four tower tests to be conducted and scheduled after agreed upon design.
- C. Face heat and charged oxygen system to be included in these tests if feasible.

15. Face Heat

- A. Test program proposal and report to be submitted  
by
- B. Charging data and servicing information to be submitted.
- C. Environmental and qualification tests to be submitted.

16. Face plate release knob protector proved to lack feasibility and  
is considered dropped.

17. New Headrest

- A. Static test, take movies to evaluate effect on human  
body and required further testing. This has been done.

Best regards